What Is Claimed Is:

- 1. A connecting element for weight measurement in a vehicle seat (21), wherein the connecting element (12 to 14, 23 to 26, 32, 36 to 38) has connecting means (33) to a single-wire bus (LIN) and bus communications means (33).
- 2. The connecting element as recited in Claim 1, wherein the connecting means (33) to the single-wire bus (LIN) is configured so that the connecting means (33) indicate an installation position of the connecting element using hardware coding.
- 3. The connecting element as recited in Claim 2, wherein the connecting means have voltage connection (VBAT), a data communications connection (L), a ground connection (GND) and a configuration connection (CONF), a wiring configuration of the configuration connection (CONF) indicating the installation position.
- 4. The connecting element as recited in one of the preceding claims, wherein the bus communications means (33) have a toroidal core store which stores measured values for the weight measurement, the indicator (73) being provided to retrieve the measured values.
- 5. The connecting element as recited in one of the preceding claims, wherein the connecting element has a memory in which a serial number is stored that characterizes the connecting element.
- 6. The connecting element as recited in one of the preceding claims, wherein the connecting element is configured as a slave to the bus communications.
- 7. A method for bus communications between a control unit (ECU) for activating personal protective means as a master, and at least one connecting element (32, 36 to 38) for weight measurement in a vehicle seat (21) as a slave, the control unit (ECU) assigning to the at least one connecting element a respective address in the light of a respective serial number of the at least one connecting element.

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- 8. The method as recited in Claim 7, wherein the control unit in each case sends the at least one connecting element a request message; and then the connecting element transmits measured values to the control unit (ECU) as a function of the request message.
- 9. A bus system having a control unit for activating personal protective means as a master, and at least two connecting elements which are configured for weight measurement in a vehicle seat as slaves, the bus system having a single-wire bus.
- 10. The bus system as recited in Claim 9, wherein the bus system has four connecting elements which are installed in a vehicle seat.

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